

## QUERCUS MONTANA (FAGACEAE), NEW TO MISSOURI

Marian Smith

Southern Illinois University  
Edwardsville, Illinois 62026, U.S.A.  
msmith@siue.edu

Nancy Parker

Southern Illinois University  
Edwardsville, Illinois 62026, U.S.A.  
njrparker@charter.net

### ABSTRACT

*Quercus montana* (Fagaceae) is a new species for Missouri, extending the western edge of the range for the species in North America.

### RESUMEN

*Quercus montana* (Fagaceae) es una nueva especie para Missouri, que extiende el extremo occidental de su área en Norte América.

*Quercus montana* Willd., rock chestnut oak, is common in the NE US, and known to occur in AL, CT, DE, GA, IL, IN, KY, ME, MD, MA, MI, MS, NH, NJ, NY, NC, OH, PA, RI, SC, TN, VT, VA, WV (Nixon & Muller 1997). The species also has been called *Q. prinus* L. in some of the North American botanical literature, but because of persistent problems with the typification and application of that epithet, we are following Nixon and Muller (1997) in using the name *Q. montana*. There has been a recent proposal to reject the name *Q. prinus* (Whittemore & Nixon 2005). We report it from four sites in Wayne Co in southern Missouri, on land owned and managed by the US Army Corps of Engineers (USACE) surrounding Lake Wappapello. The lake was created in 1941 by the USACE to control flooding of farmland on the St. François River (USACE 2002). The Wappapello Project consists of 44,000 acres of land and water; the lake varies in size from 5,200 to 23,200 acres in surface area, depending upon the season. The original vegetation of the area consisted of woodlands that were part of the eastern temperate deciduous forest (Yatskiyevych 1999). This is the first report of *Q. montana* in Missouri, and a range extension of ca. 50 km for the species on its western boundary. Because of the proximity of the *Q. montana* populations in southern Illinois (Nixon & Muller 1997; see distribution map in FNA, Vol. 3, pg. 476) and the number of populations discovered in Wayne Co, MO, the current report suggests that forested areas in counties lying between the Missouri and Illinois populations should be surveyed for the species.

The populations reported below were from three glades and an oak-hickory forest. In all cases, the specimens were collected from saplings (1–1.5 m) growing in well-drained rocky soil. All specimens were verified by Alan Whittemore (US National Arboretum, Washington, DC). Although saplings appeared to be abundant in the areas, the parent trees were not identified. At glade 1, associ-

ated species included *Acer saccharum* Michx., *Carya ovata* (Miller) K. Koch, *Platanus occidentalis* L., *Quercus alba* L., *Q. imbricaria* Michx., *Q. marilandica* Moench., *Q. rubra* L., *Q. ×tridentata* Engelm. and *Ulmus americana* L.; at glade 2, *A. negundo* L., *Cercis canadensis* L., *Q. alba*, *Q. imbricaria*, *Q. muehlenbergii* Engelm., *Q. rubra*, and *Q. ×tridentata*; and *A. saccharum*, *Q. marilandica*, *Q. muehlenbergii*, *Q. rubra* and *U. alata* Michx. at glade 3. Associated species at the oak-hickory site included *A. saccharum*, *Celtis occidentalis* L., *C. canadensis*, *Q. imbricaria*, *Q. marilandica*, *Q. stellata* Wang var *stellata*, *Q. ×tridentata*, *Q. rubra* and *U. alata*.

Voucher specimen: **MISSOURI. Wayne Co.:** go S on US67 to Hwy 34, go <1 mi W and turn N on Rebel Cave Rd (Co Rd 310); go ca. 0.25 mi, take right fork on Co Rd 311 and continue N ca. 1.25 mi to first USACE parking lot, go through gate for ca. 0.5 mi; limestone glade on left of road (glade 1); N37.12.35 W090.29.49; 7 Aug 2004. *M. Smith 04-151* (MO).

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